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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,247	09/30/2003	Koji Yamakawa	243433US2SX	2835
22850	7590	11/10/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			TRAN, BINH X	
			ART UNIT	PAPER NUMBER
			1765	

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/673,247

Applicant(s)

YAMAKAWA ET AL.

Examiner

Binh X. Tran

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-11-2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I (claims 1-6) in the reply filed on 10-20-2005 is acknowledged. The traversal is on the ground(s) that "search and examination of the entire application would not place a serious burden on the examiner". This is not found persuasive because search and examination of both group I and group II certainly place serious burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 7-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10-20-2005.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1765

5. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, applicants disclose, "a complex oxide [singular layer] is used as a mask material [singular layer]". However, in claim 4 applicants disclose, "another conductive film or an insulation film is used as the mask material". Once applicants define/refer the complex oxide as "the mask material", applicants cannot create a new layer (i.e. another conductive film or an insulation film") and refer it as "the mask material". If applicants wish to use two different materials for two different masks, applicants must refer them as "first mask" and "second mask" in order to avoid any confusion.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujiki et al. (US 6,194,228).

Art Unit: 1765

Respect to claims 1-2, Fujiki discloses a method for making a capacitor in which a dielectric (6) is used, wherein a complex oxide (SRO layer aka SrRuO_3) is used as a mask when the dielectric film (6) is etched (Fig 1, col. 5 line 21-27). Respect to claim 3, Fujiki discloses the complex oxide (SRO) is a conductive oxide and the mask material (SRO) is used as a part of the electrode after etching (Fig 1).

Respect to claim 4, Fujiki discloses a laminated structure of the conductive oxide and another conductive film (Pt layer 8) is used as a mask material (Fig 1). Respect to claim 5, Fujiki discloses the dielectric film contains PZT as a main component (layer 6 in Fig 1). Respect to claim 6, Fujiki discloses platinum (Pt) is used as a material for an electrode of the capacitor (Fig 1).

8. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Sun et al. (US 6,495,413).

Respect to claims 1-2, Sun discloses a method for making a capacitor in which a dielectric (i.e. ferroelectric dielectric) is used, wherein a complex oxide (SRO layer aka SrRuO_3) is used as a mask when the dielectric film is etched (Fig 2-4, Fig 5 step 216-218). Respect to claim 3, Sun discloses the complex oxide (SRO) is a conductive oxide (col. 3 lines 10-15) and the mask material (SRO) is used as a part of the electrode after etching (Fig 4).

Respect to claim 4, Sun discloses a laminated structure of the conductive oxide (SRO) and another insulation film (photoresist) is used as a mask material (Fig 1).

Respect to claim 5, Sun discloses the dielectric film contains PZT as a main component

Art Unit: 1765

(col. 4 line 65 to col. 5 line 19). Respect to claim 6, Sun discloses platinum (Pt) or iridium oxide is used as a material for an electrode of the capacitor (col. 5 lines 45-50).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh X. Tran whose telephone number is (571) 272-1469. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Binh X. Tran

Binh X. Tran